(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 21 October 2004 (21,10,2004)

PCT

(10) International Publication Number WO 2004/090746 A1

(51) International Patent Classification⁷: G10L 13/04, H04N 5/445

G06F 17/28,

(21) International Application Number:

PCT/IB2004/001065

(22) International Filing Date:

2 April 2004 (02.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03101004.4

14 April 2003 (14.04.2003) EP

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

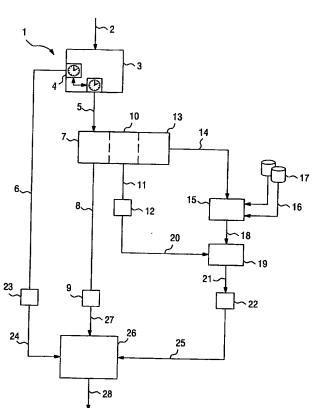
(75) Inventors/Applicants (for US only): NESVADBA, Jan, Alexis, Daniel [AT/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE). BREEBAART, Dirk, Jeroen [NL/DE]; c/o Philips

Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE). MCKINNEY, Martin, Franciscus [US/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

- (74) Agent: VOLMER, Georg; Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PERFORMING AUTOMATIC DUBBING ON AN AUDIO-VISUAL STREAM



(57) Abstract: The invention describes a system (1) for performing automatic dubbing on an incoming audio-visual stream (2). The system (1) comprises means (3, 7) for identifying the speech content in the incoming audio-visual stream (2), a speech-to-text converter (13) for converting the speech content into a digital text format (14), a translating system (15) for translating the digital text (14) into another language or dialect; a speech synthesizer (19) for synthesizing the translated text (18) into a speech output (21), and a synchronizing system (9, 12, 22, 23, 26, 31, 33, 34, 35) for synchronizing the speech output (21) to an outgoing audio-visual stream (28). Moreover the invention describes an appropriate method for performing automatic dubbing on an audio-visual stream (2).



WO 2004/090746 A1



Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report